

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

TruePosition, Inc.,)
)
Plaintiff/)
Counterclaim-Defendant,)
)
v.)
)
Andrew Corporation,)
)
Defendant/)
Counterclaim-Plaintiff.)
)

Civil Action No. 05-00747(SLR)

**TRUEPOSITION'S OPPOSITION TO ANDREW'S MOTION FOR
JUDGMENTS AS A MATTER OF LAW, OR ALTERNATIVELY, A NEW TRIAL**

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TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	NATURE AND STAGE OF THE PROCEEDINGS	1
III.	SUMMARY OF ARGUMENT	3
IV.	COUNTERSTATEMENT OF FACTS	4
	A. The Parties	4
	B. The Patent	4
	C. TruePosition's First Notices to Andrew About the 144 Patent.....	4
	D. Andrew's Willful Infringement of the 144 Patent	6
	E. Andrew's Third and Fourth Notices About the 144 Patent	8
	F. Andrew's Geometrix System.....	9
V.	ARGUMENT	11
	A. Andrew Is Precluded from Moving for Judgment as a Matter of Law on Issues Not Specifically Raised in a Proper Rule 50(a) Motion	11
	B. Applicable Legal Standards	14
	1. Standard for Judgment as a Matter of Law	14
	2. New Trial Standard	15
	C. Each of Andrew's Motions for Judgment as a Matter of Law or New Trial Should Be Denied	15
	1. The Jury Was Right: Andrew Is an Infringer.....	15
	a) The Jury Correctly Found That an Offer for Sale Occurred in the U.S.	15
	b) The Jury Correctly Rejected Andrew's "Government- Use" Defense	18
	c) The Jury Correctly Found that Geometrix Uses "One of a Prescribed Set of Reverse Control Channels"	20
	d) The Court Correctly Ruled That a Reasonable Juror Could Find That Geometrix Uses One Way Frequencies	24

e)	The Jury Correctly Found That Geometrix Includes Means-Plus-Function Limitations of Claims 1 and 22	25
f)	The Jury Correctly Decided That Geometrix Includes a “Locating Means” That Determines Locations “Without a Specific Request to Do So”	31
g)	The Court Correctly Ruled That the Word “Subscribers” Should Be Given Its Plain Meaning	34
h)	The Jury Correctly Found That Geometrix Includes The “Means for Processing” of Claim 1	36
i)	The Jury Correctly Found That Geometrix Processes Sampled Baseband Signals Into Frames Of Digital Data	39
j)	The Jury Correctly Found That Geometrix Includes “Time Stamp Bits Representing the Time” Frames “Were Produced at Each Cell Site”	40
2.	The Jury Was Right: Andrew Is a Willful Infringer	41
a)	Andrew Was Aware of the 144 Patent.....	42
b)	Andrew Acted Despite an Objectively High Likelihood That it Was Infringing.....	42
c)	Andrew Knew or Should Have Known that its Actions Created an Objectively High Risk of Infringement	45
d)	Andrew’s Various Attacks on the Willful Infringement Verdict Should Be Rejected.....	46
3.	The Court Correctly Decided That Promissory Estoppel Was a Question for the Jury.....	47
a)	The Jury Correctly Found That TruePosition Did Not Make Andrew a Promise.....	48
b)	The Jury Correctly Found that TruePosition Did Not Intend to Induce Andrew’s Action or Inaction	52
c)	The Jury Correctly Found that Andrew Did Not Reasonably Rely on Anything TruePosition Did	53
d)	The Jury Correctly Found Andrew Was Not Injured.....	54
4.	The Court Correctly Decided Fraud Is a Question for the Jury	55

a)	The Jury Correctly Found That TruePosition Did Not Misrepresent a Material Fact or Do So Knowingly	55
b)	The Jury Correctly Found That TruePosition Did Not Mislead Andrew	58
c)	The Jury Correctly Found That Andrew Did Not Reasonably Rely on Any Misrepresentation or Omission.....	60
5.	The Jury's Damage Award is Fully Supported.....	62
a)	The Evidence Supports the Jury's Finding Regarding Noninfringing Alternatives	64
b)	The Evidence Supports the Verdict that TruePosition Did Not Promise to License the 144 Patent to Andrew	70
c)	TruePosition Is Entitled to Damages Based on Loss of the Entire STC Contract.....	71
VI.	CONCLUSION.....	74

TABLE OF AUTHORITIES

FEDERAL CASES

<i>A.S. Goldmen & Company v. New Jersey Bureau of Securities,</i> 163 F.3d 780 (3d Cir. 1999).....	18
<i>AbTox Inc. v. Exitron Corp.,</i> 122 F.3d 1019 (Fed. Cir. 1997).....	22
<i>Advanced Medical Optics, Inc. v. Alcon, Inc.,</i> 361 F. Supp. 2d 404 (D. Del. 2004).....	38
<i>Amsted Industrial v. Buckeye Steel Castings,</i> 24 F.3d 178 (Fed. Cir. 1994).....	19
<i>Applied Medical Resources Corp. v. U.S. Surgical Corp.,</i> 147 F.3d 1374 (Fed. Cir. 1988).....	58
<i>Applied Medical Resources Corp. v. United States Surgical Corp.,</i> 448 F.3d 1324 (Fed. Cir. 2006).....	28, 33
<i>Aro Manufacturing Co. v. Convertible Top Replacement Co.,</i> 377 U.S. 475 (1964).....	73
<i>Caterpillar, Inc. v. Deere & Co.,</i> 224 F.3d 1374 (Fed. Cir. 2000).....	30, 38
<i>Cipriani v. Lycoming County Housing Authority,</i> 177 F. Supp. 2d 303 (M.D. Pa. 2001).....	13
<i>Cohesive Techs., Inc. v. Waters Corp.,</i> C.A. no. 98-12308, 99-11528, 01-12307, 2007 U.S. Dist. LEXIS 69464 (D. Mass. Aug. 31, 2007).....	46
<i>CytoLogix Corp. v. Ventana Medical System, Inc.,</i> 424 F.3d 1168 (Fed. Cir. 2005).....	31
<i>Czarnik v. Illumina, Inc.,</i> 437 F. Supp. 2d 252 (D. Del. 2006).....	55
<i>DeSaracho v. Custom Food Machinery, Inc.,</i> 206 F.3d 874 (9th Cir. 2000)	69
<i>Farrow v. Cahill,</i> 663 F.2d 201 (D.C. Cir. 1980)	17

<i>Fini v. Remington Arms Co.,</i> 1998 U.S. Dist. LEXIS 8261 (D. Del. May 27, 1998).....	50, 53
<i>Gatenby v. Altoona Aviation Corp.,</i> 407 F.2d 443 (3d Cir. 1968).....	48, 62
<i>Genzyme Corp. v. Atrium Medical Corp.,</i> 315 F. Supp. 2d 552 (D. Del. 2004).....	15
<i>Grain Processing Corp. v. American Maize-Products Co. ,</i> 185 F.3d 1341 (Fed. Cir. 1999).....	65
<i>Halmar Robison Group, Inc. v. Toshiba Intern'l Corp.,</i> 1999 U.S. Dist. LEXIS 19869 (W.D. Pa. Nov. 17, 1999)	16, 17
<i>Honeywell International, Inc. v. Hamilton Sundstrand Corp.,</i> 166 F. Supp. 2d 1008 (D. Del. 2001).....	15, 48, 58, 60
<i>IMX, Inc. v. Lendingtree, LLC,</i> 469 F. Supp. 2d 203 (D. Del. 2007).....	<i>passim</i>
<i>Intel Corp v. International Trade Commission,</i> 946 F.2d 821 (Fed. Cir. 1991).....	36
<i>Kutner Buick v. American Motors,</i> 868 F.2d 614 (3d Cir. 1989).....	12
<i>Lam, Inc. v. Johns-Manville Corp.,</i> 718 F.2d 1056 (Fed. Cir. 1983).....	63, 72
<i>Lightning Lube v. Witco Corp.,</i> 4 F.3d 1153 (3d. Cir. 1993).....	12, 13
<i>Lucent Tech. Inc. v. Newbridge Networks Corp.,</i> 168 F. Supp. 2d 181 (D. Del. 2001).....	29
<i>Micro Chemical, Inc. v. Lextron, Inc.,</i> 318 F.3d 1119 (Fed. Cir. 2003).....	63, 64, 65, 69
<i>Motter v. Everest & Jennings, Inc.,</i> 883 F.2d 1223 (3d Cir. 1989).....	74
<i>nCube Corp. v. SeaChange International, Inc,</i> 313 F. Supp. 2d 361 (D. Del. 2004).....	12, 13

<i>Odetics, Inc. v. Storage Tech. Corp.</i> , 185 F.3d 1259 (Fed. Cir. 1999).....	38
<i>Orlando v. Billcon International, Inc.</i> , 822 F.2d 1294 (3d Cir. 1987).....	12
<i>Pall Corp. v. Micron Separations, Inc.</i> , 66 F.3d 1211 (Fed. Cir. 1995).....	73
<i>Panduit Corp. v. Stahlin Brothers Fibre Works, Inc.</i> , 575 F.2d 1152 (6th Cir. 1978)	63
<i>Paper Converting Machine Co. v. Magna-Graphics</i> , 745 F.2d 11 (Fed. Cir. 1994).....	63
<i>Rambus Inc. v. Infineon Techs. AG</i> , 318 F.3d 1081 (Fed. Cir. 2003).....	55, 56, 57
<i>Rite-Hite Corp. v. Kelley Co.</i> , 56 F.3d 1538 (Fed. Cir. 1995).....	63
<i>Rotec Indus., Inc. v. Mitsubishi Corporation</i> , 215 F.3d 1246 (Fed. Cir. 2000).....	16, 17
<i>In re Seagate</i> , 497 F.3d 1360 (Fed. Cir. 2007).....	41, 42
<i>State Industries, Ind. v. Mor-Flo Industries, Inc.</i> , 883 F.2d 1573 (Fed. Cir. 1989).....	65
<i>Symbol Tech., Inc. v. Opticon, Inc.</i> , 935 F.2d 1569 (Fed. Cir. 1991).....	29
<i>Toxgon Corp. v. Bnfl, Inc.</i> , 312 F.3d 1379, 1381 (Fed. Cir. 2002).....	19
<i>TWM Manufacturing Co. v. Dura Corp.</i> , 789 F.2d 895 (Fed. Cir. 1986).....	65
<i>United International Holdings, Inc. v. The Wharf (Holdings) Ltd.</i> , 210 F.3d 1207 (10th Cir. 2000)	12
<i>Wesley Jessen Corp. v. Bausch & Lomb</i> , 256 F. Supp. 2d 228 (D. Del. 2003).....	16

Williams v. Runyon,
130 F.3d 568 (3d Cir. 1997).....13

Williamson v. Consolidated Rail Corp.,
926 F.2d 1344 (3d Cir. 1991).....15

Zygo Corp. v. Wyko Corp.,
79 F.3d 1563 (Fed. Cir. 1996).....66

STATE CASES

Christiana Marine Service Corp. v. Texaco Fuel,
2004 Del. Super. LEXIS 3 (Del. Super. Ct. Jan. 18, 2004)50

Engalla v. Permanente Medical Group, Inc.,
15 Cal. 4th 951 (Cal. 1997).....59

Stephenson v. Capano Development, Inc.,
462 A.2d 1069 (Del. 1983)56

STATUTES

35 U.S.C. §271(a)16, 17

35 U.S.C. § 271(f).....62

48 C.F.R. § 27.201-2.....20

48 C.F.R. § 52.227-1.....20

28 U.S.C. § 1498.....19

Fed. R. Civ. P. 50(a)12

OTHER

Restatement (Second) of Contracts.....18

I. INTRODUCTION

Andrew overwhelms the Court with a multitude of JMOLs that ignore the Court's prior *Markman* decisions, show contempt for the jury's decisions, and advance a series of baseless arguments that even Andrew cannot believe. Andrew's non-infringement JMOLs reargue positions that the Court already rejected during the *Markman* and summary judgment phases of this case. Andrew also challenges the jury's adverse findings on every issue that Andrew had to prove. In Andrew's world, no reasonable jury could have found in favor of TruePosition on any issue whatever. Andrew casually disregards the inconsistencies in its own positions, which inconsistencies undoubtedly were a factor in the jury's rejection of the credibility of its case. On the one hand, Andrew claims that no reasonable juror could have found that Andrew infringes the 144 patent. On the other, Andrew claims that no reasonable juror could have found that TruePosition did not defraud Andrew, even though, at trial, Andrew agreed that there could be no fraud unless the 144 patent was, in fact, essential to the standard that Andrew is practicing.

Andrew's motion should be viewed for what it is: a scattershot attempt to find some basis – any basis – for overturning the jury's well-founded verdict that Andrew *chose* to infringe, willfully infringe, the TruePosition patent. For the reasons that follow, Andrew's omnibus approach should be rejected and its motion should be denied in its entirety.

II. NATURE AND STAGE OF THE PROCEEDINGS

TruePosition brought this suit against Andrew's infringement of the 144 patent on October 25, 2005. (D.I. 1). Andrew pled boilerplate non-infringement and invalidity defenses, and also alleged a litany of affirmative defenses arising out of the parties' work in connection with various organizations that set technological standards: unfair competition under the California Business and Professional Code §§ 17200 *et seq.*, fraud, promissory estoppel, equitable estoppel, implied license, and unclean hands. (D.I. 48 at 9-19).

During the *Markman* phase of this case, Andrew advanced claim constructions for no less than 17 different claim terms, D.I. 130, not one of which was adopted by the Court. (Tr. at 2121:8-2124:19).¹ On summary judgment, the Court denied Andrew's motions for summary judgment of non-infringement (D.I. 258 at 6-13; D.I. 259) and invalidity for indefiniteness (D.I. 258 at 13-16; D.I. 259), a defense that Andrew raised for the first time on summary judgment. At the same time, the Court ruled that Andrew's anticipation defense and unfair competition claim failed as a matter of law. (D.I. 258 at 16-17, 28-30; D.I. 259). In response to Andrew's request that the Court "clarify" its decision that Andrew could not establish invalidity of the 144 patent (D.I. 268), on August 29, 2007, the Court again found that the patent was valid as a matter of law. (D.I. 272 at 4-6).

On August 22, 2007, the parties filed a proposed pre-trial order. (D.I. 255 and 276). In its submissions, Andrew for the first time raised a defense under 28 U.S.C. § 1498, claiming that TruePosition's infringement claim was barred because the U.S. government had authorized Andrew's actions. (D.I. 276, Ex. 4 at 2).

A 9-day jury trial was held beginning on September 4, 2007, resulting in a jury verdict that (1) found that Andrew's activities infringed the patent and rejected Andrew's non-infringement defenses, including its new section 1498 defense; (2) found that Andrew's infringement was willful; (3) awarded TruePosition \$45,300,000 in compensatory damages; and (4) rejected Andrew's fraud and promissory estoppel defenses that were based on the parties' standards-related activities. (D.I. 293). On September 18, 2007, the Court entered judgment in TruePosition's favor "for the reasons stated in the jury verdict." (D.I. 308).

¹ The trial transcript is docketed at D.I. 298-307.

Despite the jury's complete rejection of Andrew's defenses, Andrew filed a post-trial motion claiming that each and every one of the jury's findings, without exception, is wrong as a matter of law, or that, in the alternative, Andrew is entitled to a new trial with respect to each and every one of the jury's findings. (D.I. 327). On November 1, 2007, Andrew filed its opening brief in support of that motion. Importantly, Andrew had failed to raise most of the JMOLs asserted in that opening brief at trial.

Andrew also filed an opening brief in support of its "equitable claims." (D.I. 325). Andrew now claims that, even though the jury has rejected Andrew's standards-based claims of fraud and promissory estoppel, Andrew's "equitable" standards-based claims, arising out of the same conduct, survived in spite of the jury verdict.

III. SUMMARY OF ARGUMENT

Andrew offers no fewer than ten largely frivolous non-infringement defenses in support of its JMOLs. Relying on verbal subterfuge, Andrew does not comport with the *Markman* ruling and frames the issues in a way that does not comport with the law. Andrew's willfulness JMOL ignores Andrew's egregious and reckless disregard for TruePosition's patent rights. Andrew's JMOLs seeking to overturn the jury's findings of no fraud and no promissory estoppel ask the Court to second-guess the jury's assessment of the witnesses' credibility. Andrew also invites the Court to erase the jury's findings on fact-intensive issues of TruePosition's lack of intent to defraud and Andrew's lack of genuine or reasonable reliance on TruePosition's standards activities. Finally, Andrew's JMOLs on damages ask the Court to resolve conflicting testimony in Andrew's favor, a task that the jury has already performed well, with the opposite result.

IV. COUNTERSTATEMENT OF FACTS

A. The Parties

Andrew Corporation (“Andrew”) is a Delaware corporation headquartered in Illinois. (D.I. 276, Ex. 1, ¶3; PTX 479 at 2; PTX 155; PTX 216 at 1). Andrew’s Network Solutions Group is a division of Andrew with its facilities in Virginia. (PTX 142). Saudi Telecom (“STC”) is a cellular network operator based in Saudi Arabia. (*Id.*)

B. The Patent

In the early 1990s, TruePosition’s founder and two other inventors conceived and developed a revolutionary technology that allowed the position of a cell phone user to be located from the transmissions normally emitted by the user’s cell phone. (Tr. at 594-603). TruePosition was awarded the 144 patent on that invention. (PTX 1).

The invention uses the “TDOA” or “UTDOA” technique to pinpoint the location of a cell phone using the phone’s “control channel” signals rather than its “voice channel” signals. (Tr. at 143:6-9; 397:21-23; PTX 1 at col. 14, ll. 15-21). “Voice channel” signals are active only during a phone call. (Tr. at 143:23-144:3). By contrast, a cell phone sends “control channel” signals even when the user is not actively on a call. (Tr. at 143:14-23; 397:24-398:6).

C. TruePosition’s First Notices to Andrew About the 144 Patent

Since the early 1990’s TruePosition and Andrew (then called “Allen Telecom”) have been competitors, both companies manufacturing and commercializing equipment for locating cell phones. (Tr. 146:23-147:16; 362:9-17).

In December 2000, TruePosition, believing Andrew was developing technology to which its patents might be relevant, invited Andrew to apply for a license under its patents, including the 144 patent, and enclosed a copy of the 144 patent. (PTX 7; Tr. at 149:9-150:15; 498:2-499:13). The letter advised that the 144 patent related to the “use of time difference of arrival

(TDOA) and the reverse control channel" to locate cell phones. Andrew never responded to the letter. (Tr. at 151:3-8; 499:14-22).

TruePosition later learned that, instead of paying any heed to TruePosition's patents, Andrew was busy infringing them. (Tr. at 151:3-25). In December 2001, TruePosition sued Andrew for infringement of several patents covering voice channel location, but not the 144 patent. (Tr. at 151:20-152:7). At the time, Andrew's Geometrix product used technology that located cell phones through their transmissions on the voice channel, but not on the control channel as claimed in the 144 patent. (Tr. at 152:1-7; 211:18-24; 499:24-500:15). Andrew did not initiate any discussion about a license or seek to negotiate an end to the suit.

In November 2002, TruePosition sent Andrew another communication in which it offered to discuss a license under its patents, even including the 144 patent that was not then in suit. (PTX 8). Again, there was no response to TruePosition's offer. (Tr. at 503:3-504:3).

Finally, in December 2003 and again in January 2004, Andrew sat down at the bargaining table, and the parties arrived at a Settlement Agreement dated February 1, 2004. (PTX 15R). In exchange for a payment, TruePosition licensed a number of its patents to Andrew, primarily patents relating to voice channel location of cell phones. The 144 patent was not included in the license, and in fact the agreement specifically excluded it:

TruePosition hereby grants to Andrew a worldwide non-exclusive license to make, use, offer to sell, sell and import geolocation equipment under the patents and patent applications listed in Exhibit B hereto

TruePosition represents that the patents and patent applications listed in Exhibit B hereto include all of its patents and patent applications *except for the 144 and 410* patents

(PTX 15R at ¶ 6) (emphasis added). Although the 144 patent was excluded from the license, Andrew was well aware of the disclosures and scope of the 144 patent, having extensively cited it as prior art against some of the patents asserted in the litigation. (Tr. at 500:22-501:8).

As part of the agreement, and reiterating the point that the license was to voice channel technology, not control channel technology as in the 144 patent, TruePosition also gave Andrew a covenant against further suit, limited to location on the voice channel and again specifically excluding the control channel:

TruePosition hereby covenants not to sue Andrew for infringement of any patents whatsoever [for the] sale of Andrew's existing wireless network overlay "Geometrix" geolocation system.

* * *

For purposes of the covenant not to sue set forth in this paragraph, "Andrew's existing wireless network overlay 'Geometrix' geolocation system" refers to a system...that determine[s] the latitude and longitude of wireless telephones, by determining TOA, AOA, and/or *TDOA* of a signal transmitted by a wireless telephone's *voice or traffic channel (but not the control channel or access channel signals)* that was any of the ... GSM (800 and 1900 MHz Bands) air interfaces . . .

(PTX 15R at ¶¶ 9, 9(a)) (emphasis added).

Andrew agreed that there were no other outstanding promises by TruePosition relating to enforcement of its 144 patent, either in the Settlement Agreement or before:

The parties agree that no promise, representation or agreement not herein expressed has been made, and this Settlement Agreement (including Exhibits thereto) contains the entire agreement between the parties with respect to its subject matter, superseding all other prior agreements, written or oral, including without limitation the term sheet dated January 16, 2004.

(PTX 15R at ¶ 22). In essence, the Settlement Agreement provided that TruePosition could pursue Andrew for infringement under the 144 patent if Andrew began locating cell phones using the control channel in a GSM network. (PTX 15R at ¶¶ 9, 9(a); Tr. at 506:22-507:8; 512:14-24).

D. Andrew's Willful Infringement of the 144 Patent

Almost immediately, Andrew ignored the caution that the plain language of the Settlement Agreement reasonably dictated: just nine months after the Settlement Agreement was

signed, in December 2004, Andrew offered to sell a control-channel location system to Saudi Telecom. (PTX 141-176; Tr. at 700:17-701:13).

Andrew Corporation, through Andrew's Network Solutions Division, made an "offer" to Saudi Telecom ("STC") to supply a cellular telephone location system to STC. (PTX 141-176). This offer was a bid in response to a Request for Proposal ("RFP") that STC had issued for a project that STC had named the "GSM VAS Project" (PTX 141; Tr. at 700:17-701:13). STC contemplated that the GSM VAS Project would be implemented in multiple phases. (Tr. at 1863:14-21).

Andrew employees Joseph Kennedy, based in Virginia, and Mohammad Eissa, based in Illinois, prepared the bid. (Tr. at 699:25-700:16; PTX 321; PTX 142). Andrew Corporation delivered the bid to STC using Andrew Middle East, a Saudi branch of Andrew International Corporation, an Illinois Corporation, and the Al-Misehal Group, Andrew's agent based in Saudi Arabia. (PTX 141-142; PTX 157-158; Tr. at 1862:25-1863:17).

Andrew sent the bid to STC under the cover of a letter from Eissa, which listed Andrew's Network Solutions Division location in Virginia as the return address. (PTX 142). The cover letter specified the means that the bid would be delivered to STC -- two separate sealed envelopes that contained both hard copy versions and electronic copies of the bid. (*Id.*) The bid included a detailed technical description of a cellular telephone location system that included coverage for 2866 cell sites in STC's network ("LMU's") to be implemented in multiple phases. (PTX 171 at 20). The bid also included specific pricing for that system. (PTX 153 at 5).

Andrew's infringement was driven by competitive pressures. Andrew had lost a domestic contract with Cingular for the sale of cell phone location equipment to TruePosition. (Tr. at 154:5-15; 390:6-393:15). As U.S. business for voice channel technology dried up, control

channel technology increased in importance in view of a global demand for terrorist location technologies in the post-September 11th environment. (Tr. at 158:22-159:7; 210:13-211:7; 520:18-521:17; 612:14-17; 1187:19-24).

In August 2005, Andrew infringed the 144 patent again by building its first control channel location system in the U.S. and demonstrating its operation. (Tr. at 713:11-719:1; 724:16-725:10; PTX 304). Again, Andrew failed to notify TruePosition of its activity or offer to discuss a license with TruePosition, Tr. at 337:6-11, despite the fact that the Settlement Agreement made clear that Andrew had no rights of any sort under the 144 patent. (PTX 15R).

E. Andrew's Third and Fourth Notices About the 144 Patent

TruePosition first learned of Andrew's infringing activity from its employees in Saudi Arabia around this same time, August of 2005. (Tr. at 516:5-517:8). TruePosition then sent yet another letter to Andrew concerning the 144 patent that specifically referenced the system described in the STC RFP for the GSM VAS project:

TruePosition is concerned that Andrew is or may in the future be supplying geolocation equipment from the United States to Saudi Arabia or elsewhere in violation of the 144 Patent.

(PTX 17; Tr. at 162:8-163:11 and 518:2-21). Andrew offered no assurance that it would cease its infringing activity. (Tr. at 518:19-21).

On October 13, 2005, TruePosition sent a final letter to Andrew concerning the 144 patent. (PTX 18; Tr. 164:15-165:15; 518:22-519:23). Andrew ignored the October 18 deadline set in the final letter. (Tr. at 519:21-23).

Despite the warnings, Andrew made a second offer to sell the 2866 site system that was the subject of Andrew's December 2004 bid. (PTX 232; PTX 216; PTX 219; PTX 220; PTX 139; PTX 233). This second offer consisted of an October 24, 2005 cover letter from Terry Garner, the President of Andrew's Network Solutions Division, to STC, with attachments. (PTX

232). The cover letter indicated that the offer was valid “based on acceptance by Saudi Telecom Company of all submitted” attachments to the letter. (*Id.*) This offer included (a) a reduced pricing proposal for phase 1 of the project, PTX 219; (b) a formal “framework” contract that Garner signed for supply of the cellular telephone system, PTX 216; and (c) a detailed technical proposal including a technical description of the location system that was the subject of the earlier bid. (PTX 139).

The contract incorporated by reference the entirety of Andrew’s December 2004 bid. (PTX 216 at 2, items 5-6). The contract also provided that, except for the reduced pricing for Phase 1, “the bid submitted by [Andrew] was accepted by” STC once STC signed the contract. (PTX 216 at 1). Garner had signed the cover letter and contract in his office in Virginia. (Tr. 1878:21 – 1879:3).

As with Andrew’s 2004 bid, Garner sent the October 2005 offer from the United States using Andrew Middle East employees and Andrew’s local Saudi agent to deliver it (Tr. at 1862:25 – 1863:8). TruePosition brought this suit on October 25. (Tr. at 519:21-23).

Even after the suit was filed, Andrew could have turned back. STC had not yet signed a contract, and Andrew had not shipped any product to Saudi Arabia. Andrew disregarded the notice, this lawsuit, and the patent, and proceeded with its infringing activity. Instead of discussing the issue with TruePosition, Andrew instead placed its bet on a multitude of litigation-inspired defenses that both the Court and the jury ultimately rejected. Andrew started shipping infringing components soon after the suit was filed. (PTX 237).

F. Andrew’s Geometrix System

Andrew’s Geometrix system is made up of LMU’s, also sometimes called Wireless Location Sensors (“WLS’s”), that are each installed at a cell site; and a central computer called the Geolocation Control Server (“GCS”). (PTX 139 at 8; Tr. at 702 & 795-9). Geometrix

implements Time Difference of Arrival, (“TDOA”), also called “UTDOA,” to find a cell phone. (PTX 139 at 24-25). With TDOA, a cell phone transmits a signal that is received by three or more LMU’s/WLS’s, each located at a respective cell site. (PTX 139 at 24-25; PTX 478 at 40-52). At each cell site, the incoming signal is converted to a baseband frequency and, using the time that the signal arrived at the cell site, a digital frame called the “DF Results Message” is formed. (Tr. 830-835; PTX 478 at 67). The “DF Results Message” includes numerous fields of information that describe the signal, including the “TOA” field that represents the time of arrival of the signal at the cell site and also the “actual start time” field that represents the time the DF Results Message frame was produced from the incoming signal. (*Id.*)

The LMU’s/WLS’s then send their respective times of arrival to the GCS central computer in the “DF Results Message” frame. (Tr. 855-58, 863-66, 891-93). The GCS central computer associates the DF Results frames from different cell sites; from pairings of the involved cell sites (1st and 2nd sites; 1st and 3rd sites; and 2nd and 3rd sites), determines the Time Difference of Arrival between pairs; and determines the location of the phone using the Time Difference of Arrivals. (*Id.*; *see also, e.g.*, PTX 478 at 59).

In a GSM cellular network, Geometrix can determine a cell phone’s location using one of two types of channels. (Tr. at 152; 352-353). When the cell phone user is talking, the signal is sent from the cell phone to the LMU/WLS at the cell site over the Traffic Channel (“TCH”). (Tr. at 783-790; PTX 139 at 33; PTX 287 at 5; PTX 478 at 12-17). When the cell phone user is not talking, the signal travels over the Standalone Dedicated Control Channel (“SDCCH”). (*Id.*)

The GSM specifications define the Traffic and Standalone Dedicated Control Channels as “logical” channels. (Tr. at 807-810). They are communication pathways defined in the specifications that describe how data is exchanged in a cellular network. (*Id.*; Tr. at 1023-25).

These “logical” channels are in turn defined to include *physical* channels, or frequencies. In the case of the SDCCH, when it is allocated to a cell phone, it is defined to include a radio channel that is made up of a pair of frequencies. (*Id.*; Tr. at 1503-1508, 1515-1518). The first frequency is a channel that carries control information in only one direction, from a cellular telephone to a cell site. (*Id.*) The second frequency is a channel that carries control information in only the other direction, from a cell site to a cellular telephone. (*Id.*) The SDCCH is therefore sometimes called “bi-directional.” (Tr. at 1502).

In any GSM cellular network, there are a predetermined number of these “radio channels,” or frequency pairs, and this predetermined number of radio channels are defined within a predetermined range of frequencies. (PTX 476 at 2). In a GSM 900 network, for example, the network used at STC, there are 124 pre-defined channels in a predetermined range of frequencies from 890 MHz to 915 MHz that carry information only from a cell phone to a cell site. (PTX 476 at 2; Tr. 812:23-813:3; 816:9-18; 818:15-22). An SDCCH can use any one of the radio channels in this predetermined range of frequencies to transmit control information. (Tr. 811:14 – 813:24; Tr. at 1023-1025).

At trial, TruePosition’s infringement expert, Dr. Oded Gottesman, testified that Andrew is infringing Claims 1, 22, and 31 of the 144 patent. (Tr. at 763:6-13; 769:6-770:3).

V. ARGUMENT

A. Andrew Is Precluded from Moving for Judgment as a Matter of Law on Issues Not Specifically Raised in a Proper Rule 50(a) Motion

Andrew should be precluded from asserting most of its JMOLs. Only three of Andrew’s JMOL motions are procedurally proper, since only three follow from a properly laid foundation under Fed. R. Civ. P. 50(a). At the conclusion of TruePosition’s case-in-chief, Andrew’s counsel moved for judgment as a matter of law only on the following discrete points:

1. No proof of an offer to sell within the United States (Tr. at 1389:1-1391:10);
2. If there were no act of infringement within the United States (the offer), then TruePosition would be entitled to damages only on equipment that was actually shipped to Saudi Arabia, (Tr. at 1391:15-1392:11); and
3. No proof of infringement of means-plus-function elements of claims 1 and 22. (Tr. at 1392:12-1396:16).²

Andrew is barred from challenging the jury's findings in a Rule 50(b) motion on any other issue.

See Lightning Lube v. Witco Corp., 4 F.3d 1153, 1172-73 (3d Cir. 1993).

According to its terms, Rule 50(a) requires that a motion "specify the judgment sought and the law and facts that entitle the movant to the judgment." Any motion for judgment as a matter of law pursuant to Rule 50(b) must have been "preceded by a Rule 50(a) motion sufficiently specific to afford [TruePosition] with an opportunity to cure possible defects in proof which otherwise might make its case legally insufficient." *Id.*, 4 F.3d at 1172-73; *Orlando v. Billcon Int'l, Inc.*, 822 F.2d 1294, 1298 (3d Cir. 1987) ("[A] Rule 50(b) motion may consider only specific grounds asserted in the motion for directed verdict."); *Kutner Buick v. American Motors*, 868 F.2d 614, 617 (3d Cir. 1989) ("The rule that post-trial Rule 50 motion can only be made on grounds specifically advanced in a motion for a directed verdict at the end of plaintiff's case is the settled law of this circuit."); *nCube Corp. v. SeaChange Int'l, Inc.*, 313 F. Supp. 2d 361, 381 (D. Del. 2004); *United Int'l Holdings, Inc. v. The Wharf (Holdings) Ltd.*, 210 F.3d 1207, 1229 (10th Cir. 2000) ("merely moving for directed verdict is not sufficient to preserve any and all issues that could have been, but were not raised in the directed verdict motion").

At no time prior to submission of this case to the jury did Andrew even purport to raise any motion under Rule 50(a) as to the issues of willful infringement, fraud, promissory estoppel,

² Andrew made one additional detailed motion regarding infringement under the doctrine of equivalents. Through TruePosition's agreement, this JMOL was granted. (Tr. at 1495:6-11).

or the “government use” defense of 28 U.S.C. § 1498, much less specify law or facts on which it might have been entitled to judgment on these issues. The Court should preclude Andrew from now challenging the jury’s verdict on these issues via a Rule 50(b) motion in view of Andrew’s failure to raise its motions at trial. *See nCube*, 313 F. Supp. 2d at 380-81 (declining to review JMOL motion by defendant on validity because defendant failed to raise the issue of validity in its pre-verdict motion). For all but three of the remaining JMOL motions related to infringement and damages, Andrew failed to present its requests with the legal and factual specificity required by Rule 50(a). Thus, on these issues as well Andrew has waived its right to challenge the jury’s verdict now under Rule 50(b). *See Lightning Lube*, 4 F.3d at 1172-73.

Nor may Andrew escape its obligation to reveal its JMOLs at trial by relying upon catch-all statements that its counsel made at trial that purport to reserve any and every possible JMOL. At trial, Andrew’s counsel stated that “[W]e’ll move for judgment as a matter of law for infringement on all the claims, for all the accused products, and for damages.” (Tr. at 1388:13-18). He also stated that “I have plenty of other detailed motions I could make with respect to why they have not met the other claim terms.” (Tr. at 1396:20-24). However, such “catch-all” statements are not nearly specific enough to preserve a right to make a post-verdict JMOL motion. *See Williams v. Runyon*, 130 F.3d 568, 572 (3d Cir. 1997) (“[B]lanket statement that ‘there is no legally sufficient evidentiary basis for a reasonable jury to find for the Plaintiff on any of the issues that counsel have set forth in this case’ is obviously insufficient.”); *Lightning Lube*, 4 F.3d at 1172-73 (denying JMOL because specific ground related to breach of contract not raised prior to jury deliberation); *Cipriani v. Lycoming County Housing Authority*, 177 F. Supp. 2d 303, 314 (M.D. Pa. 2001) (failure to raise issues in 50(a) motion resulted in waiver). Accordingly, the only JMOL motions that are properly before the Court are those that Andrew

raised with specificity prior to the jury's deliberation: 1) no proof of an offer to sell within the United States; 2) if there was no act of infringement in the United States, then TruePosition would not be entitled to damages on equipment not yet shipped to Saudi Arabia; and 3) no proof of infringement of the means-plus-function limitations of claims 1 and 22.

B. Applicable Legal Standards

1. Standard for Judgment as a Matter of Law

To prevail on a motion for judgment as a matter of law pursuant to Rule 50(b), Andrew "must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusions implied [by] the jury's verdict cannot in law be supported by those findings." *IMX, Inc. v. Lendingtree, LLC*, 469 F. Supp. 2d 203, 208 (D. Del. 2007) (alteration in original). "Substantial evidence is such relevant evidence from the record taken as a whole as might be acceptable by a reasonable mind as adequate to support the finding under review." *Id.* If there is "substantial evidence" in the record to support the jury verdicts, Andrew's JMOL motions must be denied, even if there is evidence in Andrew's favor, and no matter its weight.

The court must give TruePosition "the benefit of all logical inferences that could be drawn from the evidence as presented, resolve all conflicts of evidence in [its] favor, and in general, view the record in the light most favorable to [TruePosition]." *Id.* "The court may not determine the credibility of the witnesses nor substitute its choice for that of the jury between conflicting elements of the evidence." *Id.* "In summary, the court must determine whether the evidence reasonably supports the jury's verdict." *Id.*

To prevail on a motion for judgment as a matter of law on an issue for which Andrew bears the burden of proof, 1) Andrew must establish its case "by evidence that the jury would not

be at liberty to disbelieve;” and 2) the “only reasonable conclusion” must be in Andrew’s favor.

Honeywell Int'l, Inc. v. Hamilton Sundstrand Corp., 166 F. Supp. 2d 1008, 1015 (D. Del. 2001).

As set forth more fully below, judgment as a matter of law is improper in this case because the evidence amply and reasonably supports the jury’s verdict.

2. New Trial Standard

To prevail on a motion for a new trial pursuant to Rule 59(a), Andrew must show that “the jury’s verdict is against the clear weight of the evidence, and a new trial must be granted to prevent a miscarriage of justice.” *See IMX, Inc.*, 469 F. Supp. 2d at 208. Andrew must meet the high burden of showing that the verdict “cries out to be overturned or shocks our conscience.”

Genzyme Corp. v. Atrium Med. Corp., 315 F. Supp. 2d 552, 562 (D. Del. 2004) (quoting *Williamson v. Consol. Rail Corp.*, 926 F.2d 1344, 1353 (3d Cir. 1991)). The court should, thus, “proceed cautiously and not substitute its own judgment of the facts and assessment of the witnesses’ credibility for the jury’s independent evaluation.” *IMX, Inc.*, 469 F. Supp. 2d at 208.

As set forth below, the verdict in this case is not against the clear weight of the evidence and will not result in a miscarriage of justice. To the contrary, the verdict is fully consistent with the weight of the evidence, and therefore Andrew’s motion for new trial should be denied.

C. Each of Andrew’s Motions for Judgment as a Matter of Law or New Trial Should Be Denied

1. The Jury Was Right: Andrew Is an Infringer

a) The Jury Correctly Found That an Offer for Sale Occurred in the U.S.

Andrew’s December 2004 and October 2005 offers are both acts of infringement under 35 U.S.C. §271(a). Under 35 U.S.C. §271(a), anyone who makes an offer for the sale of a patented invention “within the United States” infringes that patent.

Andrew's 2004 bid and its October 2005 offer were made "within the United States." Andrew is based in the United States, D.I. 276, Ex. 1, ¶3; PTX 479 at 2; PTX 155; PTX 216 at 1, and the offers themselves were prepared by Andrew employees, Garner, Kennedy and Eissa, who are based in the United States. (PTX 142; Tr. at 699:25-700:16). The cover letter on Andrew's December 2004 bid lists Ashburn, Virginia as the return address. (PTX 142). Garner signed both the cover letter and the associated contract of the October 2005 offer in the United States and dispatched it from the United States. (Tr. at 1875:18-1876:4; PTX 232; Tr. at 1862:25-1863:8; 1876:15-24; PTX 216; Tr. at 1878:21-1879:3). A reasonable juror could therefore conclude that these offers were made from "within the United States." See *Halmar Robison Group, Inc. v. Toshiba Intern'l Corp.*, 1999 U.S. Dist. LEXIS 19869, *9-10 (W.D. Pa. Nov. 17, 1999) (letter sent from Texas to offeree in Canada was offer "within the United States" under 35 U.S.C. §271(a)).³

Andrew relies on the *Rotec* case, Br. at 16,⁴ for the argument that an offer falls within section 271(a) only if "the offer itself [is] communicated from the United States." Per Andrew, the offers were not communicated from the U.S., but from Saudi Arabia, where the written offers were delivered. Andrew is wrong. The offers were prepared by Andrew's U.S.-based employees. (PTX 142; Tr. at 699:25-700:16). Those employees did not intend for the contents to be changed before they reached STC, and they sealed the contents in the U.S. before they were

³ Andrew concedes that its offers do not escape the reach of U.S. Patent law just because the sale that is contemplated by those offers is intended to take place in Saudi Arabia. (Br. at 10, 17 n.4). See *Rotec Indus., Inc. v. Mitsubishi Corporation*, 215 F.3d 1246, 1258 (Fed. Cir. 2000) (Newman, J., concurring) ("the majority opinion necessarily accepts the critical premise that an 'offer to sell' made within the United States can constitute patent infringement even when the contemplated sale could not infringe the patent"); *Wesley Jessen Corp. v. Bausch & Lomb*, 256 F. Supp. 2d 228, 233 (D. Del. 2003) (Jordan, J.) ("the Court rejects [the] argument that an "offer to sell" can only take place if there is also an unlawful sale within the United States").

⁴ Andrew's Opening Br. ISO Its Renewed Mot. For Judgment As a Matter of Law, or Alternatively, a New Trial, is docketed at D.I. 327.

dispatched to STC. (PTX 142). In stark contrast, in *Rotec*, the offerors were Mitsubishi, a company based in Japan, and Potain, a company based in France. 215 F.3d at 1249. Although the two offering companies had earlier met in the U.S., there was no evidence that the offerors' employees were based in the U.S. or that any communication of an offer originated in the U.S. *Id.* at 1255-56. Instead, the final version of the offer was prepared in Hong Kong. *Id.* at 1250. Thus, the decision in *Rotec* did not turn on the fact that the offer was physically received outside the U.S., but on the fact that the final offer did not originate *from* the U.S.

Andrew also erroneously claims, citing *Rotec*, that its offers were not made "within the United States" because there was no evidence that "Andrew met with STC in the United States." But *Rotec* did not hold or suggest that a completed offer requires that an offer be face-to-face or that any meeting is necessary. To the contrary, the *Rotec* Court held that the existence of an offer under 35 U.S.C. § 271(a) is governed by traditional contract principles. 215 F.3d at 1254-1255 ("we similarly define § 271(a)'s 'offer to sell' liability according to the norms of traditional contract analysis"). Under basic contract principles, a completed offer does not require the physical presence of an offeree. *See Halmar*, 1999 U.S. Dist. LEXIS 19869, *9-10 (letter offer sent from Texas to offeree in Canada was "offer" under § 271(a)). Indeed, an offer is a separate legal event from an acceptance of the contract. *See Restatement (Second) of Contracts* § 46 (1979) (offer may be made "to a number of persons whose identity is unknown to the offeror") (emphasis supplied); *cf. Farrow v. Cahill*, 663 F.2d 201, 210 (D.C. Cir. 1980) ("an offeror who has dispatched a written offer by mail, for example, retains the power to withdraw his offer prior to its receipt and acceptance by the offeree").⁵

⁵ Andrew also argues, citing *Rotec*, that a U.S. offer can only be established by proof that TruePosition had communicated from the U.S. a "manifestation of willingness to enter a bargain, so made as to justify another person in understanding" that there has been an invitation to enter into a bargain. (Br. at 16). But the argument is misplaced. That statement merely establishes an objective standard for determining

Finally, Andrew claims that its offers were not made “within the United States” but rather in Saudi Arabia because they were *delivered* in Saudi Arabia. Per Andrew, Br. at 15-16, it did not communicate with STC “directly,” instead using its local agent and its own affiliate, Andrew Middle East, to deliver the offers.⁶ But the location of an offer is the place from which it is sent, not the place where it is received or accepted. Indeed, under basic conflict-of-law principles, “when an offer is made in one state *and accepted in another*” the jurisdiction where the offer is made has the interest in regulating the offer. *See A.S. Goldmen & Company v. New Jersey Bureau of Securities*, 163 F.3d 780, 787 (3d Cir. 1999) (holding that New Jersey law applied to an offer to sell securities made from New Jersey to offerees in New York) (emphasis added).

For all these reasons, a reasonable juror could conclude that Andrew’s offer was made “within the United States” and not “within Saudi Arabia.” That conclusion is not contrary to the clear weight of the evidence.

b) The Jury Correctly Rejected Andrew’s “Government-Use” Defense

Andrew’s motions for JMOL and new trial on its use-for-the-government defense should be denied for the simple reason that the alleged government contract that supposedly supports the defense is fatally silent on the point. The jury was entitled to reject the uncorroborated testimony of Andrew’s only witness on the issue, which was legally insufficient to establish the defense anyway, and to focus instead – as its verdict indicates it did – on the conspicuous absence from Andrew’s alleged government contract of the specific authorization language required for the

whether the required “manifestation of willingness” has taken place at all. Restatement (Second) of Contracts § 24. It does *not* mean that the offeree must be present when the manifestation is memorialized and dispatched for there to be a complete offer. *Id.* at § 46.

⁶ Andrew Middle East is a “branch” of Andrew International Corp., an Illinois corporation. (PTX 158).

defense to stand. *See Amsted Indus. v. Buckeye Steel Castings*, 24 F.3d 178, 183 (Fed. Cir. 1994) (“[J]ury is not required to accept testimony as true, even if it is uncontradicted.”).

A Section 1498 defense is a statutory waiver of sovereign immunity and is narrowly construed. *See, e.g., Larson v. United States*, 26 Cl. Ct. 365, 369-70 (Cl. Ct. 1992). “Therefore, ‘authorization or consent requires explicit acts or extrinsic evidence sufficient to prove the government’s intention to accept liability for a specific act of infringement.’” *Id.* at 370 (emphasis supplied, citations omitted). That is, to establish the defense, it must be shown that the government not only authorized or requested the accused actions, but also that it appreciated that those actions were liable to be charged with infringement of a third-party patent.

It was Andrew’s burden to establish the affirmative defense provided by Section 1498. *Toxgon Corp. v. Bnfl, Inc.*, 312 F.3d 1379, 1381 (Fed. Cir. 2002). Although Andrew’s Terry Garner testified that the Ashburn demonstration was “for the government” and with its “authorization and consent,” his testimony is unsupported, and legally insufficient to support the defense in any event. Mr. Garner acknowledged that, although the work Andrew performed for the demonstration was for the government, the government had not authorized any infringement. (Tr. at 1870). Thus Mr. Garner’s testimony was insufficient to support the 1498 defense even if the jury had accepted it, because it does not prove – and indeed admits the absence of – the necessary element of the government’s consent to *infringement*.

This critical failure in proof is underscored by the alleged government contract, DTX 1108, introduced with Mr. Garner’s testimony. Over TruePosition’s objection that the defense was untimely, Andrew requested that the contract be presented to and considered by the jury. Now, with the jury’s rejection of the defense, Andrew’s motion does not even mention the contract. Andrew avoids it for good reason.

Government authorization contracts, such as Andrew alleged its DTX 1108 to be, are controlled by federal regulations, which state that the government “*shall insert*” a clause entitled “Authorization and Consent, in solicitations and contracts” (48 C.F.R. § 27.201-2, emphasis added) with the following language:

The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor . . . the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

48 C.F.R. § 52.227-1. DTX 1108 is 2 pages of an apparently larger contract. Neither this required language nor anything referring or relating to authorization or consent to an infringement suit appears in the scant 2 pages that Andrew deigned to produce. Nor did Mr. Garner even suggest that any of the withheld pages contained the language. Indeed, nowhere in the 2 pages Andrew produced does it even specify the subject matter of the contract. Thus, the jury was equally in its right to determine that the contract may not even pertain to the Ashburn demonstration.

The jury properly rejected Mr. Garner’s testimony on this issue on which Andrew had the burden of proof. His admission that there was no government authorization to engage in infringement, and the absence of the authorization language from the one document in which it was required to be, demonstrate that the verdict should stand as is.

c) The Jury Correctly Found that Geometrix Uses “One of a Prescribed Set of Reverse Control Channels”

Andrew argues that the Court should take away the jury’s infringement verdict because its product supposedly does not use “one of a prescribed set of reverse control channels.” (Br. at

19-25). But Andrew failed to raise this argument when it presented its JMOLs at trial. (Tr. at 1388-1397).

A reasonable jury could, and in fact must and did, conclude that Andrew's Geometrix product uses "one of a prescribed set of reverse control channels." (D.I. 292). The Court construed the phrase "prescribed set of reverse control channels" to mean "[a] predetermined range of frequencies that transmit control information in only one direction, from a cellular telephone to a cell site." (Tr. at 2121:11-14; D.I. 257 at 1-2). Therefore, under the Court's construction, the phrase "one of a prescribed set of reverse control channels" means "one of [a] predetermined range of frequencies that transmit control information in only one direction, from a cellular telephone to a cell site."

A reasonable jury could conclude that Geometrix uses "one of [a] predetermined range of frequencies that transmit control information in only one direction, from a cellular telephone to a cell site" because it uses cell phone signals sent on the SDCCH to find a cell phone. (PTX 476 at 1; Tr. at 783-790; PTX 139 at 33; PTX 287 at 5; PTX 478 at 12-17). The SDCCH uses only the frequencies in a GSM network to transmit information. (Tr. at 811:14-813:24; PTX 476 at 2; Tr. at 1023-25). In all GSM networks, there is a predefined range of frequencies that transmit control information in only one direction, from a cell phone to a cell site. (Tr. at 813:21-814:25, 1503-1508, 1515-1518; PTX 476 at 2). For example, in a GSM 900 network, the predefined range of GSM frequencies is between 890 and 915 MHz. (Tr. at 812:23-813:3; 816:9-18; 818:15-22; PTX 476 at 2). In a GSM 1800 network, the predefined range of GSM frequencies is between 1710 and 1785 MHz. (PTX 476 at 2). Therefore, the SDCCH must use "one of [a] predetermined range of frequencies that transmit control information in only one direction, from a cellular telephone to a cell site" because it uses one of only these GSM frequencies to transmit

a cell phone signal. A reasonable juror could find infringement, and the clear weight of the evidence does not compel a contrary conclusion.

Faced with an adverse record, Andrew resorts to word games. Andrew claims that no reasonable jury could determine that an SDCCH uses “one of [a] predetermined range of frequencies” because an SDCCH “can transmit anywhere in the operational range of the product, rather than in any predetermined range.” (Br. at 21). But the “operational range” of Geometrix is predetermined. (See, e.g., PTX 476 at 2). The accused Geometrix product works in a GSM 900 network. (Tr. at 818). In a GSM 900 network, the predetermined range of GSM frequencies capable of transmitting control information is between 890 MHz and 915 MHz. (PTX 476 at 2; Tr. at 812-813).

Andrew also asserts that the SDCCH does not use “one of a predetermined range of frequencies” because it can change the frequencies that it uses and can use multiple frequencies in a process called “frequency hopping.” (Br. at 21-22). But that assertion boils down to the nonsensical view that a channel that uses multiple frequencies within a predetermined range of frequencies does not use “one of a predetermined range of frequencies.” By definition, if the SDCCH uses multiple frequencies within a predetermined range of frequencies, then it must use at least “one of a predetermined range of frequencies.” See *AbTox Inc. v. Exitron Corp.*, 122 F.3d 1019, 1023 (Fed. Cir. 1997) (“patent claim parlance also recognizes that an article [such as ‘a’] can carry the meaning of ‘one or more,’ for example in a claim using the transitional phrase ‘comprising’”).

Andrew also claims that the SDCCH does not use “one of [a] predetermined range of frequencies” because both experts testified that the SDCCH can use any of the frequencies in the GSM band and it is not known in advance which one it will use. (Br. at 22-23). But, again,

Andrew's argument is one of semantic manipulation. By definition, if the SDCCH uses a frequency that is not predetermined, but that is always within a predetermined range of frequencies, then the SDCCH uses "one of a predetermined range of frequencies." Under the Court's construction, it is only the *range* of frequencies that must be predetermined, not the particular frequency allocated to the SDCCH within that range. (D.I. 257 at 1-2). Andrew is performing a "word swap" on the Court's claim construction, which required *one* of a predetermined *range* of frequencies. The Court did not construe the claim to require a predetermined *one* of a *range* of frequencies.

Andrew tries to justify its word-swap by claiming that this gloss on the Court's claim construction is supported by the Court's *Markman* opinion. (Br. at 24). Relying on a statement taken out of context, Andrew asserts that the phrase "range of frequencies" in the Court's construction of "prescribed set of reverse control channels" necessarily refers to a *channel* and, therefore, the phrase "predetermined range of frequencies" refers to a predetermined *channel* that cannot encompass the SDCCH. (*Id.* at 24).

Putting aside the propriety of attacking a jury verdict based on an isolated statement from a *Markman* opinion that neither party offered into evidence or included in the jury instructions, Andrew's post-trial gloss on the Court's claim construction invites error. The phrase "prescribed set of reverse control channels" recites a plural number of channels, not one channel, and therefore cannot be construed to require "[a] predetermined range of frequencies [that refer to a [single] channel]" as Andrew suggests. The Court construed the phrase "prescribed set of reverse control channels" to mean "[a] predetermined range of frequencies that transmit control information in only one direction, from a cellular telephone to a cell site," which would encompass multiple channels. Under that construction, the SDCCH is plainly covered by the

claim language “one of a prescribed set of reverse control channels” because it always uses one channel of a predetermined set of multiple channels, for example, one of the 124 pre-defined radio frequency channels in a GSM 900 cellular network. (PTX 476 at 2; Tr. at 783-790; PTX 139 at 33; PTX 287 at 5; PTX at 12-17; Tr. at 1522:14-19).

d) The Court Correctly Ruled That a Reasonable Juror Could Find That Geometrix Uses One Way Frequencies

Andrew also insists that an SDCCH does not use “one of [a] predetermined range of frequencies that transmit control information in only one direction, from a cell telephone to a cell site” because the SDCCH does not “transmit information in only one direction, from a cellular telephone cell site.” (Br. at 25-26). Instead, Andrew argues, the SDCCH can carry information in two directions, both from a cell phone to a cell site and from a cell site to a cell phone. (Br. at 24-25). Andrew unsuccessfully raised the very same argument during summary judgment. (D.I. 148 at 13-14). The Court made the right decision then, and that decision should not be disturbed. (D.I. 258 at 8-9). A reasonable juror could conclude that when Andrew uses the SDCCH for cell phone location, it is also using a frequency that transmits in only one direction, from a phone to a cell site. (Tr. 807-810, 1023-25, 1502-1508, 1515-1518). The issue here is not whether an SDCCH “transmits information in only one direction, from a cellular telephone to a cell site” but rather whether the SDCCH uses one of a range of *frequencies* that “transmit information in only one direction, from a cellular telephone to a cell site.” The SDCCH is a “bi-directional” logical channel only because it is comprised of two physical frequencies. (Tr. at 1502-1508). One frequency transmits control information only in the direction from the cell phone to a cell site, *i.e.*, transmits cell *phone* signals. (Tr. at 918; 1502-1508; PTX 476 at 2). The other frequency transmits control information only in the direction from a cell site to a cell phone, *i.e.*, transmits cell *site* signals. (Tr. at 1503:12-25). Therefore, whenever Andrew uses the SDCCH for cell

phone location using TDOA, it is using a frequency that carries information only from a cell phone to a cell site.

Furthermore, in all GSM networks, there is a predefined range of these frequencies that transmit control information in only one direction, from a cell phone to a cell site. (PTX 476 at 2; Tr. at 812-13). For example, in a GSM 900 network, this predefined range is 890 MHz to 915 MHZ. (*Id.*) Therefore, the SDCCH must use one of a range of frequencies that “transmit control information in only one direction, from a cellular telephone to a cell site” because it can only use one of these GSM frequencies to transmit a cell phone signal. In fact, Geometrix uses only the SDCCH frequencies that carry information from a cell phone to a cell site to locate cell phones, and is incapable of using the SDCCH frequencies that carry signals from cell sites to cell phones. (Tr. at 1504-1508).

In short, a reasonable juror could conclude that Geometrix uses “one of [a] predetermined range of frequencies that transmit control information in only one direction, from a cell telephone to a cell site” when it uses cell phone signals sent over the GSM protocol’s SDCCH to locate cell phones.

e) The Jury Correctly Found That Geometrix Includes Means-Plus-Function Limitations of Claims 1 and 22

Andrew also argues (Br. at 26-28) that the Court should take away the jury’s verdict that claims 1 and 22 were infringed because three means-plus-function elements are missing from Geometrix:

(1) Locating means for automatically determining the locations of said cellular telephones by receiving and processing signals emitted during said periodic reverse control channel transmissions (“Locating Means” Limitation of Claim 22);

(2) Means for processing said frames of data from said cell site systems to generate a table identifying cellular telephone signals and the differences in times of arrival of said cellular telephone signals

among said cell site systems (“Means for Processing” Limitation of Claim 1); and

(3) Means for determining, on the basis of said times of arrival differences, the locations of the cellular telephones responsible for said cellular telephone signals (“Means for Determining” Limitation of Claim 1).

At trial, Dr. Oded Gottesman, a computer software and cellular telecommunications expert with a Ph.D. in Electrical Engineering, Tr. at 748:1-11, 909:18-910:6, disagreed with Andrew. He testified that Geometrix literally includes the “**locating means**” element, Tr. at 927:14-928:10, and the “**means for processing**” and “**means for determining**” elements. (Tr. at 982:25-986:1).

Andrew nevertheless invites the Court to disregard Dr. Gottesman’s testimony because he supposedly did not prove that Geometrix includes a structure that is the same or equivalent to the structures in the patent specification that correspond to the means-plus-function limitations. (Br. at 26-29). The structures corresponding to the means-plus-function limitations that the Court has identified in its claim construction, and that Andrew now contends are missing from Geometrix, are in the table below, with the disputed portions of those structures highlighted:

Means Plus Function Limitation	Corresponding Structure As Construed by the Court with Disputed Components in Bold
Locating Means (Claim 22)	“The means of the disclosed structure is a computer processor programmed to perform the algorithm disclosed at col. 13, ll. 33-62 (ending with the letter “C”); Fig. 7 at the first six blocks and table; col. 17, l. 26 – col. 18, l. 34 (ending with “0.0001,” but minus any reference to “frequency difference data,” “frequency differences results,” or “frequencies”); and Figs. 8A through the top four elements of Fig. 8D (minus any reference to “frequency difference” or “frequencies”); or equivalents of such a computer processor.” (Tr. at 2123:7-25; Br. at 26; D.I. 257 at 4).

Means for Processing (Claim 1)	“The means of the disclosed structure is a computer processor programmed to perform the algorithm disclosed at col. 13, ll. 33-56 (ending with the acronym “TDOA”); Fig. 7 at the first four blocks and table; col. 17, ll. 26-68 (minus any reference to “frequency difference data” or “frequency difference results”); and Figs. 8A-8B (minus any reference to frequency differences”); or equivalents of such a computer processor.” (Tr. at 2121:24 – 2122:15; Br. at 26; D.I. 257 at 3).
Means for Determining (Claim 1):	“The means of the disclosed structure is a computer processor programmed to perform the algorithm disclosed at col. 13, l. 58 (beginning with the word “This”) through col. 13, l. 62 (ending with the letter “C”); Fig. 7 at the fifth and sixth blocks; col. 18, ll. 1-34 (ending with “0.0001,” but minus any reference to “frequencies”); and Fig. 8C through top four elements of Fig. 8D (minus any reference to “frequencies”); or equivalents of such a computer processor.” (Tr. at 2122:16 – 2123:6; Br at 26; D.I. 257 at 3-4).

According to Andrew, Dr. Gottesman supposedly “failed to compare any structure in Figures 8A-8E with the accused Geometrix system.” (Br. at 27). But Figure 8E is not even part of any structure in the Court’s construction of the means-plus-function limitations. (Tr. at 2121:24-2123:25). Furthermore, Dr. Gottesman *did* compare to Geometrix the components of the other Figure 8 drawings recited in the Court’s claim construction, Figures 8A, 8B, 8C and the top four boxes of Figure 8D.

For example, Dr. Gottesman explained, in great detail, recorded over twenty-five trial transcript pages, why the structure of the software running in Geometrix is equivalent to the structure the Court identified as the “**locating means**” recited in claim 22. The Court’s claim construction specified that the structure corresponding to the “**locating means**” limitation included the first six blocks and table of Fig. 7, Figure 8A through the top four blocks of Figure 8D, and portions of the specification that describe those drawing excerpts. (Tr. 2123:7-25). Dr.

Gottesman explained how this structure, an algorithm, was equivalent to an algorithm that Geometrix executed in the GCS processor. (Tr. at 927:14-18; 929:13-931:8; 935:12-16). First, he testified how the GCS performed a process that is substantially the same as the process that is described in the first six blocks of Figure 7 using a way-result analysis. (Tr. at 959:6-11). See *Applied Medical Resources Corp. v. United States Surgical Corp.*, 448 F.3d 1324, 1333 (Fed. Cir. 2006) (“Once the relevant structure in the accused device has been identified, a party may prove that it is equivalent to the disclosed structure by showing that the two perform the identical function in substantially the same way, with substantially the same result”).⁷ Then he testified how Geometrix obtained the same result as the process described in the first six blocks of Figure 7. (Tr. at 935:17-935:22; 940:15-942:20). Next, Dr. Gottesman explained how the Geometrix GCS obtained this result in substantially the same way as the process described in first six blocks of Figure 7. (Tr. at 942:23-943:13). Geometrix performed the first (Tr. at 943:14-943:25), third, (Tr. at 950:9-954:8), fourth, *id.*, fifth, (Tr. at 954:9-17), and sixth, (Tr. at 954:19-959:5), blocks and the table, (Tr. at 950:9-954:8), of Figure 7 exactly and second block of Figure 7 substantially. (Tr. at 944:1-949:9).

He then explained how Geometrix performed a process that is substantially the same as the process that is described in Figure 8A through the top four blocks of Figure 8D. (Tr. at 959:19-961:16). He testified, based on his own analysis and evidence from the patent specification, Tr. at 959:19-960:11; PTX 1, Col. 13, ll. 33-36, that the process described in Figure 8A through the top four blocks of Figure 8D is the very same as that described in the first

⁷ Andrew also takes issue with Dr. Gottesman’s testimony that Geometrix performs a function identical to that of the means-plus-function limitations in a section separate from the section in which it claims that Dr. Gottesman’s structural analysis is faulty. (Br. at 26-29; 29-33; 35-36). TruePosition addresses Andrew’s claim that Dr. Gottesman has not proven that Geometrix performs the function identical to that of the means-plus-function limitations below.

six blocks of Figure 7. (Tr. at 960:12-961:12). Dr. Gottesman concluded that the GCS performs a process that is substantially the same as the process that is described in Figure 8A through the top four blocks of Figure 8D since, as he already explained, the GCS substantially performs the process of Figure 7. (Tr. at 961:7-961:16).

Finally, Dr. Gottesman explained why the “**means for processing**” and “**means for determining**” limitations of claim 1 are literally present in Geometrix for the same reasons that the “**locating means**” of claim 22 is literally present in Geometrix. (Tr. at 982:25 – 986:1). Under the Court’s construction, the structure that corresponds to the “**means for processing**” and “**means for determining**” limitations of claim 1 are subsumed within the structural process that corresponds to the “**locating means**” limitation. (*Compare* Tr. 2121:24-2122:15 & Tr. at 2122:16-2123:6 *with* Tr. 2123:7-25 & Br. at 26).

Andrew did nothing to undermine Dr. Gottesman’s analysis on cross examination:

Q. If we take the Court’s construction, we look at what do we have to use as a baseline *for comparison to see if there’s something the same or equivalent*, you’ve got to use all of these boxes in Figure 7, *all of these boxes in Figure 8, all of these boxes in Figure 8B, all of these boxes in Figure C, this first half of Figure 8D*, all of the yellow text in Column 13, and all of this text in Column—in yellow from Column 17 and 18; is that right?

A. That is correct.

....

Q. But the analysis that actually has to be done is to look at all of that stuff I showed you; is that right?

A. Yes *just like I did.*

(Tr. at 1009:16-1010:16) (emphasis supplied). Thus Dr. Gottesman’s analysis was more than sufficient. *Symbol Tech., Inc. v. Opticon, Inc.*, 935 F.2d 1569, 1576 (Fed. Cir. 1991); *Lucent Tech. Inc. v. Newbridge Networks Corp.*, 168 F. Supp. 2d 181, 212 (D. Del. 2001) (citing *Symbol*

Tech. and stating, “the role of challenging the factual underpinnings of an expert’s position belongs to the opponent on cross examination”).

Dr. Gottesman was correct to compare the overall structure in the Court’s claim construction to Geometrix rather than follow Andrew’s approach of focusing exclusively on Figure 8, one component of that structure. The issue is not whether TruePosition has proven that the *individual components* of the corresponding structure included in the Court’s claim construction, such as the Figure 8 drawings of the patent, are found in Geometrix. Rather, the issue is whether the *overall structures* in the Court’s claim construction that correspond to the means-plus-function limitations are the same or equivalent to the structures in Geometrix. See *Caterpillar, Inc. v. Deere & Co.*, 224 F.3d 1374, 1380 (Fed. Cir. 2000). In *Caterpillar*, the Federal Circuit reversed a district court’s grant of summary judgment of non-infringement because the district court impermissibly focused on the *individual components* of the structure corresponding to a means plus function element to find non-infringement as opposed to the *overall structure*:

The district court held that no reasonable jury could find the accused and claimed structures to be insubstantially different in the way they performed the tensioning function, because the accused devices lacked a front axle, a spherical bearing, and angled struts and there were differences in the number and size of parts involved. *However, the individual components, if any, of an overall structure that corresponds to the claimed function are not claim limitations. Rather, the claim limitation is the overall structure corresponding to the claimed function.*" [Citation omitted] Therefore, the district court conducted an impermissible component-by-component analysis to determine that no reasonable jury could find structural equivalence (emphasis supplied).

Id. at 1380 (emphasis supplied). Reasonable jurors could, indeed must and did, conclude that Dr. Gottesman has shown that the *overall structures* in the patent specification that correspond to the means-plus-function limitations are the same or equivalent to the structures in Geometrix.

Andrew relies heavily on *CytoLogix Corp. v. Ventana Med. Sys., Inc.*, 424 F.3d 1168, 1178 (Fed. Cir. 2005) to overturn the jury verdict. (Br. at 28-29). But that case is irrelevant. In *CytoLogix*, the patentee made no comparison of any kind between the disclosed structure corresponding to a means plus function clause and the accused product and never even identified that structure. *Id.* at 1178. In contrast and as shown above, Dr. Gottesman did compare the structure corresponding to the means-plus-function limitations.

Andrew suggests that Dr. Gottesman did not consider the entirety of the Court's construction of the means-plus-function limitations because that construction lays out the disclosed structures in "meticulous" and unusual detail. (Br. at 26-27). But Dr. Gottesman testified repeatedly that he considered the entirety of the Court's construction. (Tr. at 756:20-757:8; 928:23-930:8).⁸

f) The Jury Correctly Decided That Geometrix Includes a "Locating Means" That Determines Locations "Without a Specific Request to Do So"

Andrew claims that the Court should take away the jury's infringement verdict as to Claim 22 because no structure within Geometrix supposedly performs a function identical to the function the Court construed for the "locating means." Andrew failed to raise this assertion when it presented its JMOLs at trial, but it would fail, as does its request for a new trial.

The Court's construction of the "locating means" limitation is set forth below.

⁸ Andrew asserts that, since Figure 7 runs on a different processor than Figure 8, Dr. Gottesman was wrong in his testimony that the portions of Figure 7 and Figure 8 referenced in the Court's claim construction described the same structure. (Br. at 27). But Andrew's assertion is not only inconsistent with the patent specification (PTX 1, Col. 13, ll. 33-36), but also with the Court's claim construction. For each of the Means-Plus-Function Limitations, the Court clearly described the disclosed structures as a single "computer processor" that runs an "algorithm" described in portions of both Figure 7 and Figure 8 "or equivalents of such a computer processor." (Tr. at 2123:7-25; 2121:24-2122:15; 2122:16-2123:6).

Means Plus Function Limitation	Court's Construction with Function Specified in Bold
Locating Means(Claim 22)	" <i>[T]he function of the disclosed structure is to determine, without a specific request to do so, the locations of cellular telephones by receiving and analyzing the signals that the cellular telephones broadcast periodically over the reverse control channel.</i> The means of the disclosed structure is a computer processor programmed to perform the algorithm disclosed at col. 13, ll. 33-62 (ending with the letter "C"); Fig. 7 at the first six blocks and table; col. 17, l. 26 – col. 18, l. 34 (ending with "0.0001," but minus any reference to "frequency difference data," "frequency difference results," or "frequencies"); and Figs. 8A through the top four elements of Fig. 8D (minus any reference to "frequency differences" or "frequencies"); or equivalents of such a computer processor." (Tr. at 2123:7-25; Br. at 26; D.I. 257 at 4).

Dr. Gottesman identified the structure in Geometrix that satisfies this limitation as the GCS processor that runs algorithms described in the "recv.c", (Tr. at 943:14-943:25), "allocatememory", (Tr. at 944:1-949:9), "prefixmix", (Tr. at 950:9-954:17), and "fixmix", (Tr. at 954:19-959:5), software routines (the "Programmed GCS Processor"). The Programmed GCS Processor determines the locations of cellular telephones (Tr. at 931:16-18), without a specific request to do so (Tr. at 933:10-934:15) by receiving (Tr. at 934:9-15) and analyzing (Tr. at 934:24-95:3) cellular telephone signals that are broadcast discontinuously (Tr. at 935:6-8) over a standalone dedicated control channel. (Tr. at 935:9-11). Therefore, a reasonable juror could conclude that the Programmed GCS Processor performs a function identical to that of the "**locating means**" limitation.

Andrew nevertheless insists that no reasonable juror could conclude that the Programmed GCS Processor performs the function of the “**locating means**” limitation because it does not perform the required function “without a specific request to do so.” (Br. at 30). According to Andrew, the evidence showed that “the accused Geometrix system locates only when specifically requested” and Dr. Gottesman acknowledged that “the overall Geometrix location process ‘starts by some request that comes from the user.’” (Br. at 30).

But again, Andrew’s framing of the issue distorts the claim language and the Court’s construction. The issue here is not whether the entire “*accused Geometrix system*” or the “*overall Geometrix location process*” determines locations “without a specific request to do so,” but whether the *relevant structure* Dr. Gottesman identified determines locations “without a specific request to do so.” “Literal infringement of a means-plus-function claim limitation requires that *the relevant structure* in the accused device perform the identical function recited in the claim and be identical or equivalent to the corresponding structure in the specification.” See *Applied Medical Resources Corp.*, 448 F.3d at 1333 (reversing district court’s grant of summary judgment of non-infringement) (emphasis supplied).

Dr. Gottesman testified that the relevant structure, *i.e.*, the Programmed GCS Processor, does perform its location determination without a specific request to do so:

Q. With respect to *the part of the GeoMetrics that specifically performs the step*—specifically performs Step B of Claim 22, the part of GeoMetrics that you contend performs this part of claim 22, Step B, is that a result of a specific request?

A. Not at all, because at that phase, the system already in the middle of its processing, and as soon as it receives its time of arrival, it just takes them and starts—do the rest of the processing, calculating the differences and determining the location. At that phase, it doesn’t need any additional request to come and to tell it what to do. It just does it automatically.

(Tr. at 933:10-934:8; *see also* Tr. at 1075:9-25 & 865:20-25). There was no evidence to the contrary. There was no evidence that the Programmed GCS Processor, *i.e.*, the “rec.v,” “allocatememory,” “prefixmix” or “fixmix” software processes that run on the GCS, received or processed any specific request in order to perform their location function.

Andrew nevertheless insists that the structure within Geometrix that Dr. Gottesman identified does not determine locations “without a specific request to do so” because components in Geometrix other than the structure he has identified as corresponding to the “**locating means**” function receive location requests. (Br. at 30-31; Tr. at 932:10-24). But the Court’s claim construction does not require that these other components operate without a request.

A reasonable juror could conclude that the structure Dr. Gottesman identified performs a function identical to the function of the “**locating means**,” and the clear weight of the evidence does not compel a contrary conclusion.

**g) The Court Correctly Ruled That the Word
“Subscribers” Should Be Given Its Plain Meaning**

Andrew also argues that the Court should take away the jury’s infringement verdict, at least with respect to Claim 22, on the ground that its product has no “database means . . . for providing access to said database to subscribers at remote locations.” (Br. at 33-35). According to Andrew, the word “subscribers” in claim 22 is limited to cell phone subscribers and therefore does not encompass STC, which has access to the Geometrix database. (Br. at 33-34). Andrew unsuccessfully raised precisely the same argument during the *Markman* phase of this case (D.I. 130 at 4), but failed to raise it when it presented its JMOLs at trial. (Tr. at 1388:2-1401:4).

The Court correctly accorded “subscribers” its plain meaning during *Markman* and should adhere to that decision. (D.I. 257). The Court rejected Andrew’s claim that the word “subscribers” was limited to cell phone subscribers. (D.I. 130 at 4). Instead, the Court agreed

with TruePosition that the word “subscribers” did not require explicit construction (D.I. 130 at 4) because it could be accorded its plain meaning. (Tr. at 2121:7-2124:18).

Andrew nevertheless insists that “subscribers” in the phrase “database means . . . for providing access to subscribers at remote locations” is limited to people possessing mobile phones. (Br. 33-35). Andrew implies, just as it did during *Markman*, D.I. 189 at 8-9, that unless its proposed construction is adopted, the word “subscribers” will have two different meanings in Claim 22 because the preamble recites the phrase “subscribers possessing mobile phones.” (Br. at 33). But in fact, the Court has accorded the word “subscribers” the same, single meaning, *i.e.*, the plain meaning, throughout the claim. (Tr. 2121:7-11).

Andrew nevertheless adds a new twist to its *Markman* arguments, now claiming that Dr. Gottesman admitted that, under the Court’s construction, the word “**subscribers**” has two different meanings. (Br. at 33). But that was not his testimony. Instead, Dr. Gottesman pointed out that the Court had construed the *word* “**subscribers**” to have a different meaning from the *phrase* “**subscribers possessing mobile phones**.” (Tr. at 1102-03).

Under the Court’s proper plain meaning construction of “**subscribers**,” Andrew’s Geometrix product does, in fact, include a database that is remotely accessible to “**subscribers**.” At trial, the evidence showed that Geometrix includes a database that is remotely accessible and that, in fact, has been accessed by STC and the Saudi Ministry of the Interior who pay fees for the privilege of doing so. (Tr. at 732:8-18; Tr. at 962:1-3; 964:1-965:10; PTX 139 at 33, 35; Tr. at 967:19-968:10; 1102:8-15; 966:6-8). Therefore, a reasonable juror could conclude that Geometrix includes “database means . . . for providing access to said database to subscribers at remote locations.”

Even assuming the word “subscribers” in the phrase “**database means . . . for providing access to subscribers at remote locations**” means cell phone subscribers, a reasonable juror could still conclude that there was infringement. Even under that construction, TruePosition had no need to prove that Andrew provided database access to remote cell phone subscribers. Instead, the claim would only require a *means* for doing so. *See Intel Corp v. Int'l Trade Commission*, 946 F.2d 821, 832 (Fed. Cir. 1991) (where claim recited a “programmable selection means,” the “accused device, to be infringing, need only be capable” of operating in the functional mode recited by the claim, and actual operation in that mode was not required). Dr. Gottesman pointed to evidence that the Geometrix database “is a secure web based component, so the user can be remotely located, and can access the [database] using *any standard computer* that has a web browser.” (PTX 139 at 33 (emphasis supplied); Tr. at 966:6-8). A reasonable juror could conclude that since the Geometrix database is accessible to *any standard computer*, it is accessible by computers owned by cell phone subscribers, even if no subscribers have, in fact, actually accessed the database.

h) The Jury Correctly Found That Geometrix Includes The “Means for Processing” of Claim 1

Andrew also reargues that the “**means for processing**” limitation of claim 1 is missing from Geometrix because it lacks *components* of the structures in the patent specification corresponding to that limitation. (Br. at 35-36). For the same reasons that TruePosition described above, a reasonable juror could conclude that Geometrix does have a structure equivalent to the structure the Court described in its claim construction:

Means Plus Function Limitation	Court’s Claim Construction of Corresponding Structure Required by Claim
Means for Processing (Claim 1)	“The means of the disclosed structure is a computer processor programmed to perform

	the algorithm disclosed at col. 13, ll. 33-56 (ending with the acronym "TDOA"); Fig. 7 at the first four blocks and table; col. 17, ll. 26-68 (minus any reference to "frequency difference data" or "frequency difference results"); and Figs. 8A-8B (minus any reference to frequency differences); or equivalents of such a computer processor." (Tr. 2121:24-2122:15; Br. at 26; D.I. 257 at 3).
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The Court's claim construction specified that the structure corresponding to the "**means for processing**" limitation included the first four blocks and table of Fig. 7, Figure 8A-8B and the portions of the specification that describe those drawing excerpts. (Tr. at 2121:24-2122:15; D.I. 257 at 3). As described above, Dr. Gottesman explained how this structure, an algorithm, was equivalent to an algorithm Geometrix executed in the programmed GCS Processor.

Andrew claims that there is no infringement because the Programmed GCS Processor does not perform cross-correlation, which is the second block of Figure 7. (Br. at 36).

According to Andrew, TruePosition "had to demonstrate the GCS has the 'cross correlation' structure required by the limitation, or its equivalent structure." (Br. at 35). But Andrew's claim is false and, even if it were true, Dr. Gottesman did show that the "cross correlation component," the second block of Figure 7, is found substantially in Geometrix.

Andrew's claim that TruePosition had to prove that the cross-correlation block of Figure 7 is either literally or equivalently in Geometrix is false. The "cross correlation" component is not a "structure" corresponding to the "**means for processing**" limitation. It is a component of that structure. TruePosition did not have to prove that every *component* of the structure recited in the Court's claim construction, such as the "cross correlation" block of Figure 7, is in the Geometrix GCS, *either literally or equivalently*. The cross correlation process could be missing entirely and the jury could still find infringement. "The individual components, if any, of any

overall structure that corresponds to the claimed function are not claim limitation.” See *Caterpillar, Inc.*, 224 F.3d at 1380 (reversing district Court’s summary judgment of non-infringement). Rather, the claim limitation is “the overall structure corresponding to the claim limitation.” *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1268 (Fed. Cir. 1999) (reversing district court’s grant of JMOL of non-infringement). “It is impermissible [to conduct] a component by component analysis to determine that no reasonable jury could find structural equivalence.” *Advanced Med. Optics, Inc. v. Alcon, Inc.*, 361 F. Supp. 2d 404, 414 (D. Del. 2004) (quoting *Caterpillar, Inc.*, 224 F.3d at 1380) (denying summary judgment of non-infringement)).

In any event, Dr. Gottesman, as part of his testimony that the overall structure required by the claim is equivalently in Geometrix, specifically addressed the “cross correlation” component of that structure. The second block of Figure 7, the “cross-correlation” component of the relevant structure, refers to (1) associating data from different cell sites and (2) cross correlating that associated data resulting in a time of arrival calculation. (PTX 1 at col. 13, 11. 36-42). Dr. Gottesman explained how the GCS performed this function identically. He explained how the GCS (1) obtains cross correlation results from each cell site, Tr. at 944:12-17, 949:6-9, 948:24-949:1, and (2) then associates and matches those cross correlation results, Tr. at 946:2-5, 947:19-29, thus reversing the order of, but otherwise performing substantially the same sub-process that is described Block 2 of Figure 7.

Andrew makes the error-inviting claim that “no §112, ¶6 equivalence question is presented” and that “the issue here relates solely to the physical location of the ‘**means for processing**’ limitation, which must be in the GCS. (Br. at 35). But Dr. Gottesman identified

the structure that satisfies the “**means for processing**” limitation as the Programmed GCS, which is located exclusively in the GCS. (Tr. at 944:12-944:17, 949:6-9, 982:25-983:16).

In short, a reasonable juror could conclude that the structures in Geometrix are the same or equivalent to the structures in the Court’s claim construction that correspond to the means-plus function limitations.

i) The Jury Correctly Found That Geometrix Processes Sampled Baseband Signals Into Frames Of Digital Data

Andrew asks the Court to take away the jury’s infringement verdict, at least with respect to claim 1, on the ground that its product supposedly does not perform “**sampling said baseband signal at a prescribed sampling frequency and formatting the sample signal into frames of digital data.**” Again, Andrew did not think enough of this argument to mention it when it orally presented its JMOLs at trial. (Tr. at 1388:12-1396:16).

A reasonable juror could – and in fact must – conclude that Andrew’s Geometrix does perform “**sampling said baseband signal at a prescribed sampling frequency and formatting the sample signal into frames of digital data.**” In Andrew’s WLS, a signal is received at an antenna, Tr. 976:9-15, converted to “baseband” by an analog receiver (Tr. 978:4-24; PTX 19 at 5 “Analog Receiver”), and then the baseband signal is sampled by an Analog to Digital converter, (Tr. at 981:4-7; PTX 19 at 5), “Analog to Digital Converter” Box) at a prescribed rate. (Tr. at 981:20-22, 1554:7-12). Therefore Geometrix performs the recited “sampling” step. The baseband signal is then processed into digital DF Results Message frames that have a particular format. (Tr. at 981:25-982:4; PTX 1 at Col. 20, 1. 20-23; PTX 476 at 3; Tr. at 835:8-13). Therefore, Geometrix performs “**formatting the sample signal into frames of digital data.**” A reasonable juror could therefore conclude that Geometrix performs “**sampling said baseband signals at a prescribed sampling frequency and formatting the sample signal into frames of**

digital data.”

Andrew claims that no reasonable jury could find that Geometrix performs the step of “**formatting**” the incoming base band signal “**into frames of digital data.**” But the evidence showed that the signal received at the WLS and converted to baseband, Tr. at 978:4-24; PTX 19 at 5, “Analog Receiver” and “Digital Down Converter,” Tr. at 1438:9-17, is immediately converted into a digital frame:

Q. The signal is received at the cell site and there’s a time of arrival that you calculate; is that right?

A. Yes.

Q. And then a little bit after that, the *frame is produced from that signal*; is that right?

A. Right.

Q. Now, to you and me, to human beings, would that be about the same time?

A. Yes.

(Tr. at 835:8-16 (emphasis supplied)). This formatted frame captures the signal characteristics, including its time of arrival. (Tr. at 855:19-25, 952:9-12; DTX 339 at 1). Therefore, a reasonable juror could conclude that Geometrix performs the step of “**formatting**” this base band signal “**into frames of digital data.**”

**j) The Jury Correctly Found That Geometrix Includes
“Time Stamp Bits Representing the Time” Frames
“Were Produced at Each Cell Site”**

Andrew urges the Court to take away the jury’s infringement verdict, at least with respect to claim 31, on the ground that its product supposedly does not produce “**frames of data, each frame comprising . . . time stamp bits representing the time at which said frames were produced at each cell site.**” But Dr. Gottesman testified repeatedly that the “actual start time” field in the DF Results message frames represent the time that the frame was produced. (Tr. at 832:16-22, 833:16-20, 890:24-891:18; PTX 476 at 3, “actual_start_time”).

Andrew invites the Court to disregard Dr. Gottesman’s testimony because he supposedly